Opening Statement
of
The Honorable Thelma Drake
Vice Chairman, Subcommittee on Energy and Mineral Resources
House Resources Committee

Oversight Field Hearing
on
"Renewable Ocean Energy: Tides Currents and Waves"

September 18, 2006

The Subcommittee meets today to review the status of alternative energy research on ocean tides, currents, and waves and to review opportunities for development in Virginia, other states and the Outer Continental Shelf.

This hearing is the seventh in a series on alternative and renewable energy the Committee has held this year.

It is the first hearing strictly focused on renewable energy from the ocean.

It is a pleasure to be here at Old Dominion University in Norfolk, home to the Virginia Coastal Energy Research Consortium.

The Consortium was established by SB 262 the "Virginia Energy Plan" introduced by Senator Frank Wagner and signed into law by Governor Kaine this past year.

Three of our witnesses today are a part of the consortium conducting research on aspects of renewable ocean energy – energy that can be used to generate electrical power.

It's important for all of us to understand what types of energy are required by our society and where we can supplement our use of fossil fuels with renewable and alternative energy sources.

Three types of energy are required to meet the needs of our society:

- transportation fuels, 27% of the Nation's energy requirement – largely oil – only one percent is from biofuels;
- feed stock for manufacturing of chemicals and other products – primarily natural gas; and
- fuels used to generate electrical power -- a mixture of coal, natural gas, hydropower, and nuclear.

Today only 10% of the Nation's energy needs are generated from renewable and alternative energy resources.

Wind, geothermal, biomass and solar only contribute two percent of the power used by electric power utilities.

The percentage of energy produced from alternative and renewable sources is expected to rise dramatically within the near future as States adopt renewable energy portfolios for electrical power utilities.

Clearly we have work to do in this area and tides, waves and currents will play a greater role in the future meeting these requirements.

Our State has the potential to produce base load electrical power from clean renewable ocean energy.

In addition to our witnesses from Old Dominion and Virginia Tech we will hear from the Navy, Department of Energy, the Ocean Renewable Energy Coalition and some of the coalition's member companies.

The Navy has an active renewable and alternative energy program that includes research on wave technology and the use of Ocean

Thermal Energy Conversion to generate electricity and potable water at military installations on tropical islands.

The Department of Energy has been and will continue to carry the lead on Federal renewable and alternative energy research programs working in partnership with other Federal agencies, academia, and industry.

As a Nation we need to understand that our growth in population and growth in energy consumption have kept pace with one another since the 1970's.

During that time period the GNP and vehicle miles driven have grown exponentially while significant decreases in the five criteria air pollutants have occurred.

These milestones can not have been achieved without energy efficiencies, pollution control devices and good conservation practices.

However today we are faced with a growing world wide demand for energy as China, India and other developing Nation's are industrializing and modernizing their countries.

We can no longer depend on other Nation's to provide us with much of the energy that we need. It's time to develop more of our own resources and that includes alternative and renewable energy.

As a Nation we will need to develop all types of energy – fossil fuels, nuclear, solar, hydropower, wind, ocean energy and unconventional resources such as oil shale and gas hydrates.

So now, I want thank the witnesses for joining us today and I look forward to your testimony and learning more about Virginia's opportunities for generating clean energy form the ocean.